



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

**On a collection of Hymenoptera made in Jamaica
during April, 1891.**

BY WILLIAM J. FOX.

The collection on which this article is based was made in Jamaica, during April of the present year, by myself and Mr. Charles W. Johnson, of the Wagner Free Institute of Science, Philadelphia.

About seventy species are given herein, which will be increased to nearly one hundred when the Formicidæ and a number of species of Andrenidæ have been classified.

EVANIIDÆ.

Evania (Hyptia) sp.

Three specimens; Port Antonio. It is entirely black with the metathorax bright rufous, and the apex of the petiole banded with whitish.

ICHNEUMONIDÆ.

Hemiteles incertus Cr.

Hemiteles incertus Cr., Proc. Ent. Soc. Phila. iv, p. 22, ♀ ♂.

Port Antonio; Kingston; Bog Walk. Several ♀ ♂ specimens.

Eiphosoma annulata Cr.

Eiphosoma annulata Cr., Proc. Ent. Soc. Phila., iv, p. 54, ♀ ♂.

One ♀ specimen; Kingston.

Eiphosoma nigrovittata Cr.

Eiphosoma nigrovittata Cr., Proc. Ent. Soc. Phila., iv, p. 55, ♀.

Eiphosoma sp. ?

One ♀ specimen; Port Antonio.

Ophion thoracicus Cr.

Ophion thoracicus Cr., Proc. Ent. Soc. Phila., iv, p. 55.

Two specimens; Bog Walk, Parish of St. Catherines.

Ophion concolor Cr.

Ophion concolor Cr., Proc. Ent. Soc. Phila., iv, p. 56.

Several specimens; Port Antonio.

Ophion flavus Fabr.*Ichneumon flavus* Fabr., Ent. Syst. ii, p. 179.*Ophion flavus* Fabr., Ent. Syst. Suppl. p. 236; Guér., Gén. des Ins. Hymén. pl. iii, 2e, liv., No. 7.

Numerous specimens; Port Antonio.

CHALCIDIDÆ.

Smicra nigropicta Cr.*Smicra nigropicta* Cr., Proc. Ent. Soc. Phila., iv, p. 95.

Several specimens; Port Antonio.

Chalcis incertus Cr.*Chalcis incertus* Cr., Proc. Ent. Soc. Phila., iv, p. 101.

One specimen; Port Antonio.

SCOLIIDÆ.

Myzine nitida Sm.*Myzine nitida* Sm., Catal. Hym. Brit. Mus. iv, p. 77, ♂; Cress., Proc. Ent. Soc. Phila., iv, p. 113, ♂.

♀.—Black, sparsely clothed with pale hairs; scape of antennæ, basal half of mandibles, tegulæ and legs, except coxæ, rufous; clypeus, two spots above the antennæ sometimes confluent, a spot before anterior ocellus, a line on inner orbits, which converges on the vertex, the cheeks entirely so, being connected by a line extending across the occiput, an interrupted line on anterior portion of prothorax, an abbreviated line before its posterior margin, a large spot on dorsulum, a spot before the tegulæ, two large spots on the pleura, the anterior spot elongate, somewhat emarginate on its posterior margin, basal half of scutellum, postscutellum, a large spot on each side of metathorax, which is acutely and deeply emarginate anteriorly, and a medial line above, most of the coxæ, a large spot on each side of the abdominal segments 1-5 above, a broad band on segments 1-3 beneath, that on the first segment emarginate medially on its posterior margin, the one on the two next segments interrupted medially, all yellow; flagellum testaceous, front strongly punctured, the punctures becoming sparse towards the vertex, which is shining. Prothorax rather strongly and closely punctured, on the sides of the thorax beneath the wings, the punctures are stronger and more widely separated, the rest of thorax very sparsely punctured; metathorax above with exceedingly fine punctures, on the sides transversely striated, the striations becoming almost obliterated on the posterior face; wings hyaline, nervures and stigma black; outer margin of posterior tibiæ with a row of strong, short spurs. Abdomen smooth, shining, with a few sparse punctures about the middle of the segments, each of the segments with a transverse row of punctures, before their apical margin, the last segment is finely and longitudinally striated, bronzy in certain lights, beneath the abdomen is obscurely rufous. Length 13 mm.

Port Antonio; Annotto Bay. Three ♀ and numerous ♂ specimens.

Elis (Dielis) fulvohirta Cr.

Scolia (Elis) fulvohirta Cr., Proc. Ent. Soc. Phila., iv, p. 119, ♀ ♂.

One ♂ specimen ; Port Antonio.

Elis (Dielis) trifasciata Fabr.

Tiphia trifasciata Fabr., Ent. Syst. ii, p. 246.

Scolia trifasciata Klug., Weber and Mohr., Beitr. i, p. 32.

Kingston ; Port Antonio. Numerous ♀ and ♂ specimens.

Elis (Dielis) atrata Fabr.

Scolia atrata Fabr., Ent. Syst. ii, p. 228.

Colpa atrata Lep. St. F. Hym. iii, p. 535.

Scolia micans Guér. Voy. Coq. Zool. ii. pt. 2, p. 251 ; Beauv., Ins. Afr. et Amer. p. 258, pl. x, fig. 3, ♀.

Port Antonio ; Annotto Bay. Several ♂ specimens.

POMPILIDÆ.

Pompilus cubensis Cr.

Pompilus anceps Cr. (nec. Smith), Proc. Ent. Soc. Phila., iv, p. 130, ♂, 1865.

Pompilus cubensis Cr., Trans. Am. Ent. Soc. i, p. 93, ♀ ♂, 1867-68.

Two ♀ specimens ; Port Antonio ; Morant Bay.

Pompilus propinquus n. sp.

♀.—Black, the abdomen with a bluish reflection, the thorax but slightly so ; front convex, with a strong medial impressed line ; clypeus prominent, its anterior margin strongly incurved medially, sparsely punctured, and with a few long, black hairs ; posterior margin of the prothorax angular ; metathorax smooth, rounded behind ; wings dark fuscous, with a strong violaceous reflection, third submarginal cell triangular, the width at the top equal to one-half of the space between the second transverse cubital nervure and second recurrent nervure ; all the tibiæ and tarsi spinose, those on the anterior tibiæ within, longest and fewer, the outer margin scarcely spinose, tarsal claws armed with an acute tooth near base. Abdomen on the third to fifth segments beneath thinly clothed with long, black hairs, the last segment above and beneath more thickly so. Length 10 mm.

One specimen ; Kingston. Closely allied to the preceding species, but is much smaller, the violaceous reflection is not so strong, and the anterior tibiæ, as well the others, are spinose.

Pompilus æneopurpureus n. sp.

♀.—Head and thorax bluish purple, the abdomen with a strong bronzy reflection in certain lights ; antennæ black, longer than the thorax ; a slight longitudinal impression between the antennæ, extending to the center of the face ; clypeus prominent, its anterior margin slightly incurved in the middle ; head much broader than the thorax, which is a little broader before than behind ; posterior margin of prothorax angular ; tegulæ black ; metathorax smooth, with a medial impressed line ; anterior wings smoky, with a bronzy reflection, the apical margin, the submedian cell, a cloud in the marginal, first and second sub-

marginal darker; posterior wings, except apex, hyaline; tibiæ spinose, the anterior pair but slightly so on their inner margin, tarsal claws armed with a tooth near the base, the posterior tibiæ within and the tarsi in certain lights fuscous. Abdomen smooth, polished, the last segment clothed with long, black hairs. Length 8.5 mm.

♂.—Closely resembles the ♀, but is narrower and smaller, the face and clypeus are slightly tinged with green, the anterior margin of the clypeus subtruncate, the face is sparsely clothed with silvery pubescence, the anterior wings are darker, and the third submarginal cell narrower and more triangular, the legs more feebly spinose, and the apex of abdomen has a fringe of short hairs; the tarsal claws are cleft. Length 7—8 mm.

One ♀ and three ♂ specimens; Kingston and Port Antonio.

Pompilus Cressonii Dewitz.

Pompilus Cressonii Dewitz, Berl. Ent. Zeits. xxv, p. 203, t. v, fig. 6, ♀ ♂, '81.

One ♀ specimen; Kingston.

Salus opacifrons n. sp.

♀.—Black, front opaque, with a slight medial impressed line; antennæ as long as the head, thorax and first two segments of the abdomen together, the last joint bent inward medially on its inner edge, so that there appears to be two joints; anterior margin of clypeus smooth, polished, very slightly incurved; mandibles shining; posterior margin of prothorax angular; metathorax with a strong medial furrow, otherwise smooth; anterior wings subhyaline, iridescent, with a broad fuscous band at the basal nervure, and a large dark cloud in the region of the marginal, second and third submarginal, and the third discoidal cells, posterior wings subhyaline, paler towards the base; tibiæ and tarsi spinose, the anterior pair feebly so, the posterior tibiæ serrate-spinose; first joint of the posterior tibiæ at base, on its inner margin, with a cilia of short bristles, the inner spur of the posterior tibiæ at base also bristly. Abdomen slightly shining, shorter than the thorax, segments 2-5, and the last segment above and beneath with long, black hairs. Length 8—9 mm.

Six specimens; Bog Walk, Parish of St. Catherines; Kingston; Port Antonio.

This species may belong to the subgenus *Cyphononyx* Dhlb., the claws being cleft, but the metathorax is not armed with "a little curved hook on each side before the stigma."

Agenia compressa n. sp.

♂.—Black, clothed with sericeous pile, more dense and silvery on the face, thorax on sides and beneath, and the legs; tips of mandibles reddish; anterior margin of clypeus subtruncate; posterior margin of the prothorax angular; metathorax above deeply furrowed, the furrow becoming very feeble on the posterior face; wings hyaline, the anterior pair with a fuscous band enveloping the marginal, second and third submarginal and part of the third discoidal cells, a more faint band crosses the wings in the vicinity of the basal nervure, second recurrent nervure angular at about the middle, third submarginal cell larger than the second, narrowed towards the marginal and receiving the second re-

current nervure before its middle. Legs black, the tibial spurs and a spot at base of posterior tibiæ white, the anterior tibiæ and tarsi fuscous, posterior tibiæ feebly spined. Abdomen petiolate, compressed, two transverse spots on the second and third segments, and the last segment white. Length 7 mm.

Four specimens; Port Antonio.

Planiceps euferalis n. sp.

♂.—Black, clothed with silvery sericeous pubescence, more dense on the face, anterior and posterior coxæ and the metathorax. Antennæ short, thick, the second joint of the flagellum longer than the first; clypeus rounded in front; front with a slight medial impressed line; posterior margin of the prothorax subarcuate; metathorax above strongly furrowed, the posterior face depressed medially or slightly excavated; medial and posterior tibiæ rather strongly spinose, the posterior femora within very smooth and shining; wings hyaline, iridescent, the apical margin of the anteriors fuscous, second recurrent nervure received by the cubital nervure beyond the second submarginal cell the latter contracting on its upper half. Abdomen a little shorter than the thorax, shining, the basal portion of segments 2-4 above, with a band of silvery sericeous pubescence. Length 5.5 mm.

One specimen; Port Antonio. Closely allied to *P. feralis* Cr. from Florida and Texas.

Ceropales cubensis Cr.

Ceropales cubensis Cr., Proc. Ent. Soc. Phila. iv, p. 132, ♀; Trans. Am. Ent. Soc. i, p. 141, ♂, 1867-68.

Two specimens, ♀ ♂; Kingston.

SPHEGIDÆ.

Sphex ichneumonea Linné.

Var. **dorsalis** Lep.

Sphex dorsalis Lep. St. F. Hym. iii, p. 347, ♂, Sm. Cat. Brit. Mus. Hym. iv, p. 259, ♀.

Two ♀ specimens; Port Antonio. This variety can be distinguished by the petiole and a broad band on the apical half of the third and on the fourth and fifth segments of the abdomen being black.

Var. **fulviventris** Guér.

Sphex ichneumonea var. *fulviventris* Kohl., Ann. k. k. Natur. Hofm. Bd. v, p. 430.

One specimen; Port Antonio.

Sphex singularis Sm.

Sphex singularis Sm., Brit. Mus. Cat. Hym. iv, p. 261, ♂, 1856.

Two ♂ specimens; Port Antonio; Annotto Bay.

Sphex (Priononyx) thomæ Fabr.*Sphex thomæ* Fabr., Syst. Ent. p. 346.*Sphex thomæ* Dhlb., Hym. Eur. i, pp. 28 et 425, ♂ ♀.

One ♀ and two ♂ specimens ; Kingston ; Port Antonio ; Annotto Bay.

LARRIDÆ.

Larra fulviventris Guér.*Lyrops fulviventris* Guér., Icon. Rég. Anim. iii, p. 440.*Larrada fulviventris* Sm., Cat. Hym. B. M. iv, p. 286.*Larra fulviventris* Kohl., Verh. z.-b. Ges. Wien., xxxiv, p.

Three specimens ; Port Antonio.

Larra vinulenta Cr.*Larrada vinulenta* Cr., Proc. Ent. Soc. Phila. iv, p. 138.

Two specimens ; Port Antonio.

There are at least three more species of this genus, which, at the present time, I am unable to determine with accuracy.

Tachytes insularis Cr.*Tachytes insularis* Cr., Proc. Ent. Soc. Phila. iv, p. 140, ♀ ♂.

One specimen, ♂ ; Port Antonio.

BEMBICIDÆ.

Bembex sp.?

Five specimens, males ; Kingston ; Morant Bay. Seems to be closely related to *B. pallidipicta* Sm. (Ann. Mag. N. H. (4), xii, p. 300, ♀) from Mexico.

Bembex argentifrons Cr.*Bembex argentifrons* Cr., Proc. Ent. Soc. Phila. iv, p. 141, ♀ ♂.

Several females ; Kingston.

Monedula signata Linné.*Vespa signata* Linné, Syst. Nat. i, p. 952.*Apis vespiformis* DeG., Ins. iii, p. 570, pl. xxviii, fig. 3.*Bembex signata* Fabr., Syst. Ent. p. 361.*Monedula signata* Latr., Gen. Cr. et Ins. iv, p. 100.

Five specimens, ♀ ♂ ; Port Antonio ; Morant Bay.

MIMESIDÆ.

Psen argentifrons Cr.*Psen argentifrons* Cr., Proc. Ent. Soc. Phila. iv, p. 152, ♀ ♂.

Two ♀ specimens ; Port Antonio.

CRABRONIDÆ.

Trypoxylon excavatum Sm.

Trypoxylon excavatum Sm., Cat. Hym. Brit. Mus. iv, p. 380, ♀ ♂.

One specimen, ♀ ; Kingston.

Crabro cræsus Lep. St. F.

Solenius cræsus Lep. St. F., Annu. Soc. Ent. Fr. iii, p. 727.

Crabro cræsus Sm., Cat. Hym. Brit. Mus. iv, p. 424.

Numerous ♂ and ♀ specimens; Port Antonio.

EUMENIDÆ.

Eumenes colona Sauss.

Eumenes colona Sauss., Guépes Sol. p. 70, ♀, 1852.

One specimen; Kingston.

Odynerus tibialis Sauss.

Odynerus tibialis Sauss., Synopsis Amer. Wasps, p. 241, ♀ ♂, 1875.

Five ♀ specimens; Kingston; Port Antonio.

These specimens agree well with Saussure's description, except that the legs are reddish fulvous. His types come from Venezuela and Haiti.

Odynerus bucuensis Sauss.

Odynerus bucu Sauss., Mon. Guépes. Sol. p. 185.

Odynerus bucuensis Sauss., Mon. Guépes. Sol. Suppl. p. 232.

Three ♂ specimens; Kingston.

Odynerus simplicicornis Sauss.

Odynerus simplicicornis Sauss., Mon. Guépes. Sol. Suppl. p. 253; Guér., La Sagra's Hist. Cuba, Ins. p. 771, pl. xix, fig. 5.

Three specimens; Kingston.

VESPIDÆ.

Polistes americanus Fabr.

Vespa crinita Felton, Philos. Trans. 1773, liv, p. 53, tab. 6.

Vespa americana Fabr., Syst. Ent. p. 370.

Vespa tricolor Fabr., Syst. Ent. p. 369.

Polistes Billardieri Fabr., Syst. Piez. p. 274.

Polistes americana Fab., id. p. 275.

Common in all localities visited.

ANDRENIDÆ.

Angochlora regina Sm.

Angochlora regina Sm., Cat. Hym. Brit. Mus. (Andrenidæ), p. 77, ♀.

Several specimens; Port Antonio.

APIDÆ.

Pasites pilipes Cr.

Pasites pilipes Cr., Proc. Ent. Soc. Phila. iv, p. 183, ♂ ♀.

One specimen ; Kingston.

Epeolus vicinus Cr.

Epeolus vicinus Cr., Proc. Ent. Soc. iv, p. 185. ♀ ♂.

Nine ♀ ♂ specimens ; Port Antonio.

Epeolus rufo-clypeus n. sp.

♀.—Black, the clypeus, labrum, mandibles, except apical third, basal two-thirds of antennæ, tegulæ, thorax, on sides and scutellum obscurely so, and legs reddish ; face, cheeks, occiput, line on prothorax, two short longitudinal lines on dorsulum anteriorly, as well as its posterior margin, a line over the tegulæ, tubercles, sides of thorax sparsely so, posterior margin of scutellum, postscutellum, a spot on each side of metathorax, the posterior coxæ, a somewhat angular mark on each side of first abdominal segment above, and a line on the apical margin of the second, third and fourth segments, all pale yellow, the markings of the head and thorax palest ; anterior margin of clypeus slightly incurved, the clypeus finely and closely punctured, front and vertex strongly and closely punctured. Thorax rather strongly punctured, more distinctly so on the sides ; scutellum rounded, slightly emarginate medially, with a strong, blunt tooth on each side, base of metathorax with an enclosed triangular space, which is very finely punctured, and with a slight medial impression ; wings yellowish hyaline, the nervures yellowish ferruginous, second submarginal cell in one wing petiolate, in the other subpetiolate. Abdomen beneath, and the fifth segment above, brownish ; the enclosed space on the fifth segment very finely punctured, and with a cilia of pale hairs on its apical margin, which is truncate. Length 8 mm.

One specimen ; Kingston. This may be the ♀ of *E. pulchellus* Cr. from Cuba.

Cœlioxyys vigilans Sm.

Cœlioxyys vigilans Sm., Descr. of n. sp. Hymen. p. 105, ♀ ♂, 1879.

Two specimens, ♀ ♂ ; Kingston, ♂ ; Port Antonio, ♀.

Megachile Martindalei n. sp.

♀.—Black ; head, thorax and first two segments of the abdomen above clothed with dark orange-rufous pubescence, that on the cheeks much paler ; clypeus nearly naked, strongly punctured, with a smooth and polished central carina, its anterior margin slightly incurved, with a very slight tooth medially ; mandibles with two large teeth at tip, with an acute carina before and on the apical half of the outer margin, between the inner carina and the inner margin the mandibles are rugoso-striate. Antennæ black, the last joint somewhat flattened ; vertex behind the ocelli finely and closely punctured. Thorax very finely punctured, beneath thinly clothed with yellowish fuscous pubescence ; basal two-thirds of wings pale yellow, the rest smoky, slightly iridescent, nervures black, except at extreme base of the wings, where they are ferruginous ; tegulæ ful-

vous; legs black, the anterior pair and the posterior tarsi within, clothed with pubescence somewhat similar to that on the cheeks, the rest of the legs clothed with pale pubescence; basal half of tarsal spurs reddish. Abdomen shining, very finely punctured, sparsely clothed with black hairs, the apical margin of the third, fourth and fifth segments above with a line of white pubescence, beneath segments 2-5 densely clothed with long, pale pubescence, which is much darker than that on the apical margins of the segments above, the apical segment beneath is clothed with long black pubescence. Length 14—15 mm.

♂.—Differs from the ♀ as follows: the front, face and clypeus is densely clothed with pale yellow pubescence; the anterior trochanters are armed with a stout tooth; the apical margins of the abdominal segments beneath on their apical margin with white pubescence; the last segment strongly and roundly emarginate, its surface rugose. Length 14—15 mm.

Four specimens, Kingston.

This species seems to be related to *M. singularis* Cr. from Cuba. Dedicated to Mr. I. C. Martindale, of the Acad. of Natural Sciences, Philadelphia.

Megachile Poeyi Guér.

Megachile Poeyi Guér., Icon. Règn. Anim. iii, p. 450; La Sagra's Hist. Cuba, Ins. p. 778, pl. xix, fig. 10.

Six ♀ ♂ specimens; Kingston.

Megachile multident n. sp.

♀.—Black; head very finely and closely punctured, front and vertex opaque; clypeus rather strongly punctured, with a longitudinal polished line medially. Antennæ black, basal half of mandibles, sides of face, front and cheeks, clothed with pale pubescence; dorsulum and scutellum finely and closely punctured; the suture between the dorsulum and scutellum and the posterior margin of the latter, a line over the tegulæ, the pleuræ, metathorax and legs, clothed with pale pubescence, the dorsulum and scutellum are otherwise than the parts mentioned, naked; wings hyaline, nervures black, tegulæ pale yellowish; legs black, the inner margin of the anterior tibiæ and tarsi as well as the inner side of the posterior tarsi with brown hairs. Abdomen very finely punctured, a spot on the side of the first, and the apical margin of segments 1-5 with pale pubescence, the pubescence sometimes interrupted medially, beneath the segments are clothed with pale fuscous pubescence. Length 8 mm.

♂.—The male varies in the color of the pubescence, it being usually pale or golden yellowish, but in some specimens it is colored as in the ♀, and in the number of teeth on the last segment of the abdomen; front and clypeus entirely covered with long pubescence. Antennæ long, reaching to the metathorax, black; legs black, clothed with pale pubescence, anterior coxæ unarmed, last segment concave on each side of the middle, covered with appressed pubescence, its apical margin strongly and roundly emarginate medially, with a long tooth or spine on each side, and with from one to five smaller teeth between the base and the tooth at the side of the emargination. Length 7—8 mm.

Five ♀ and eight ♂ specimens; Kingston.

Megachile curta Cress.

Megachile curta Cress., Proc. Ent. Soc. Phila. iv, p. 178, ♂.

♀.—Black, shining, front opaque, occiput and vertex shining, finely punctured, clothed with long fuscous or black hairs; base and apex of clypeus, the sides of the face and the cheeks with long, pale hairs, those on the side of the face mixed with black hairs, the mandibles shining, clothed with short, pale fuscous pubescence at base, and with a few erect reddish brown hairs on the other portions, a broad sulcus extends from near the base, which is, on the apical two-thirds, formed into a moderate outward curve, the sulcus extending between the two large teeth at the apex; clypeus shining, strongly punctured, the punctures becoming sparse medially, at which place there is a longitudinal smooth and polished line. Antennæ black, the flagellum testaceous beneath; thorax very finely punctured, the punctures becoming larger and more separated toward the apex of dorsulum; seen from above, the dorsulum and scutellum appear nude, from the side they are clothed with short, erect, black hairs, those on the scutellum becoming longer toward the apical margin; tegulæ black, shining, a patch of hairs above and beneath the tegulæ, a much larger patch on each side of the metathorax white, two transverse irregular patches at apex of dorsulum yellowish, the rest of the thorax is clothed with pale fuscous hairs; wings hyaline, iridescent, the apical margin broadly fuscous, nervures and stigma black; legs black, clothed with pale pubescence, that on the tarsi, especially the posterior pair within, reddish brown; outer side of posterior tibiæ and first joint of the tarsi, which is slightly concave, shining, strongly rounded; tibial spurs brownish. Abdomen with exceedingly fine punctures, the first segment in front clothed with pale fuscous hairs, a patch on each side of the first segment whitish, the apical margins of segments 1-5 clothed with pale yellowish hairs, the pubescence interrupted medially on segments 1-3, sometimes that on the fourth segment is also interrupted, ventral scopa white, the sides margined with black hairs. Length 8—10 mm.

♂.—Black, shining; the mandibles, at base, armed with a strong tooth on outer edge, the face, front and clypeus thickly clothed with long pale hairs, intermingled with black; wings subhyaline, nervures and stigma black-brown, anterior coxæ armed with a strong tooth, the anterior tarsi not flattened. Antennæ reaching to the apex of first abdominal segment; abdominal segments 1-5 above with a transverse impression before the apex, those on segments 4 and 5 interrupted medially, a spot on each side of the first, and a transverse mark on segments 2-4 laterally, as well as the pubescence of the legs and abdomen beneath, white; sixth segment above slightly carinated medially; the last segment emarginate medially, with a strong depression before the emargination. Length 8—9 mm.

Var. *a*.—Pubescence of the head, in front, yellow. The tooth at base of mandibles slightly longer.

Five ♀ and four ♂ specimens; Port Antonio.

This species seems to be allied, according to the description, to *M. ornata* Sm. from St. Domingo.

Three specimens; Kingston.

Megachile pedalis n. sp.

♂.—Black, elongate; front and vertex strongly and closely punctured; clypeus strongly punctured, shining medially, mandibles black; basal portion of flagellum obscurely rufous; front and cheeks clothed with long pale hairs; thorax finely punctured, sparsely clothed with pale pubescence, which is more dense on the sides and beneath, in the sutures between the dorsulum and scutellum and the scutellum and metathorax; tegulæ reddish; wings subhyaline, the apical margin but slightly darker, nervures and stigma brownish; legs ferruginous, the anterior and posterior coxæ black; the anterior femora and tarsi within, with white pubescence, that on the femora long, the rest of the legs sparsely clothed with short, brownish pubescence, anterior coxæ armed with a strong tooth. Abdomen shining, rather strongly punctured, the first segment oblique in front, concave, segments 1-5 with an apical band of white pubescence, the bands interrupted medially; last segment above rugose, its apical margin deeply and broadly emarginate; beneath, the apical margin of the first and second, and the third and fourth entirely, reddish. Length 7-9 mm.

Three specimens; Kingston.

Mellissodes trifasciata Cr.

Mellissodes trifasciata Cr., Proc. Acad. Nat. Sci. Phila. 1878, p. 208, ♀.

Port Antonio; numerous specimens.

Mellissodes mimica Cr.

Mellissodes mimica Cr., Trans. Am. Ent. Soc. ii, p. 298, ♂.

Kingston; Port Antonio. Numerous specimens. This is probably the male of the preceding species.

Xylocopa morio Fabr.

Apis morio Fabr., Ent. Syst. ii, p. 315, ♀.

Xylocopa morio Fabr., Syst. Piez. p. 338.

Xylocopa morio Sm., Trans. Ent. Soc. Lond. 1874, p. 285.

One ♀ specimen. Given to me by Mr. Henry Vendreys, of Kingston.

Exomalopsis pulchella Cr.

Exomalopsis pulchella Cr., Proc. Ent. Soc. Phila. iv, p. 191, ♀ ♂.

Numerous ♂ and one ♀ specimens. Kingston; Port Antonio.

Exomalopsis rufitarsis Sm.

Exomalopsis rufitarsis Sm., Descr. of new species of Hym. 1879, p. 126, ♀.

Three specimens; Port Antonio.

Exomalopsis sp. ?

One ♂ specimen, Kingston. It agrees tolerably well with the description of *E. pubescens* Cress., from Cuba, but the pubescence is whitish and the apical margin of the wings are fuscous.

Centris hæmorrhoidalis Fabr.

Centris hæmorrhoidalis Fabr., Syst. Piez. p. 359, ♂ ; Lep., St. Farg. Hym. ii, p. 155, ♀.

Three ♀ specimens; Kingston; Port Antonio.

Centris sp. ?

Two ♂ specimens. It agrees well with the description of *C. crassipes* Sm. (Ann. Mag. N. H. (4) xiii, p. 372, ♂), but the posterior femora are not incrassate, and the clypeus has two white oblique spots, it not being entirely white as in *C. crassipes*.

Centris fasciata Sm.

Centris fasciata Sm., Cat. Hym. Brit. Mus. (Apidæ), p. 377, ♀ ♂.

Two ♀ and one ♂ specimens; Kingston.

Euglossa piliventris Guér.

Euglossa piliventris Guér., Icon. Règne Anim. p. 458, ♀ ♂.

One ♀ specimen. Taken at Bog Walk, Parish of St. Catherines.

Melipona fulvipes Guér.

Melipona fulvipes Guér., Icon. Règne Anim. iii, p. 462, pl. 75, fig. 6; Poey, Mem. Hist. Nat. Cuba, i, p. 142, pl. 6, figs. 14-22.

Numerous specimens. Taken from the nest, near Kingston.

Apis mellifica Linné.

Apis mellifica Linné, Faune Suec. 1697.

Common at Kingston and Port Antonio.
